

CLAIMS

What is claimed is:

1. An emergency cellular telephone for establishing communication with multiple emergency response services, comprising:
 - a handheld housing;
 - a cellular transmitter disposed within the housing for transmitting only first and second outgoing cellular signals, the first outgoing cellular signal for establishing a first communication session with a first emergency response service and the second outgoing cellular signal for establishing a second communication session with a second emergency response service;
 - a cellular receiver disposed within the housing for receiving only first and second incoming cellular signals, the first incoming cellular signal received from the first emergency response service during the first communication session, and the second incoming cellular signal received from the second emergency response service during the second communication session;
 - a power supply disposed within the housing for supplying electrical power for the telephone;
 - a first activation button attached to the housing that, if pressed a first time when the telephone is in an off mode, causes the electrical power from the power supply to be provided to the cellular transmitter and receiver, initiates activation of the cellular receiver to search for an available cellular system channel, and initiates activation of the cellular transmitter to transmit the first outgoing cellular signal to establish communication with the first emergency response service, thereby simplifying communication with the first emergency response service in a stressful situation;
 - a second activation button attached to the housing that, if pressed a first time when the telephone is in the off mode, causes the electrical power from the power supply to be provided to the cellular transmitter and receiver, initiates activation of the cellular receiver to search for an available cellular system channel, and initiates activation of the cellular transmitter to transmit the second outgoing cellular signal to establish communication with the second emergency response service, thereby

30

simplifying communication with the second emergency response service in a stressful situation; and

the cellular transmitter operable to transmit the first outgoing cellular signal to establish the first communication session regardless of whether the transmitter had last established a first communication session or a second communication session, and
35 operable to transmit the second outgoing cellular signal to establish the second communication session regardless of whether the transmitter had last established a first communication session or a second communication session.

2. The emergency cellular telephone of claim 1 further comprising:

a microprocessor for controlling the emergency cellular telephone based on execution of a first or second set of operational instructions;

the first activation button, when pressed a first time, causing the electrical power from the power supply to be provided to the microprocessor, thereby energizing the microprocessor to begin executing the first set of operational instructions; and
5 the second activation button, when pressed a first time, causing the electrical power from the power supply to be provided to the microprocessor, thereby energizing the microprocessor to begin executing the second set of operational instructions.

3. The emergency cellular telephone of claim 2 further comprising:

a modular Global Positioning System (GPS) receiver unit operable to mechanically engage the handheld housing as a snap-on module, the GPS receiver unit including a GPS receiver for generating location coordinates of the telephone; and

5 the microprocessor for receiving the location coordinates from the GPS receiver and providing the location coordinates to the cellular transmitter; and
the cellular transmitter for transmitting the location coordinates to the first or second emergency response services.

4. The emergency cellular telephone of claim 3 further comprising:

a battery compartment disposed within the housing;

an interface port disposed on the housing and providing electrical connection to the microprocessor; and

5 the modular GPS receiver unit further comprising:

a battery pack integrated with the GPS receiver, the battery pack operable to be inserted into the battery compartment of the telephone housing when the GPS receiver unit is mechanically engaged with the telephone housing, the battery pack thereby serving as the power supply for the telephone; and
10 an interface connector mechanically operable to engage the interface port when the GPS receiver unit is mechanically engaged with the telephone housing, for providing electrical connection between the GPS receiver and the microprocessor.

5. The emergency cellular telephone of claim 3 further comprising:
a decoder for receiving a prompt signal from the first or second emergency response service after cellular communication has been established therewith, and for providing the prompt signal to the microprocessor; and
5 the microprocessor for providing the location coordinates to the cellular transmitter upon receipt of the prompt signal from the decoder.

6. The emergency cellular telephone of claim 5 further comprising:
a memory device for storing an identification number associated with the telephone;
the microprocessor further for retrieving the identification number from the memory device and for providing the identification number to the cellular transmitter upon receipt of the prompt signal from the decoder; and
5 the cellular transmitter for transmitting the identification number to the first or second emergency response services.

7. The emergency cellular telephone of claim 1 further comprising:
a memory device for storing an identification number associated with the telephone;
the microprocessor further for retrieving the identification number from the memory device and for providing the identification number to the cellular transmitter; and
5 the cellular transmitter for transmitting the identification number to the first or second emergency response services.

8. The emergency cellular telephone of claim 7 further comprising:
a decoder for receiving a prompt signal from the first or second emergency response
service after cellular communication has been established therewith, and for
providing the prompt signal to the microprocessor; and

5 the microprocessor for providing the identification number to the cellular transmitter upon
receipt of the prompt signal from the decoder.

9. The emergency cellular telephone of claim 2 further comprising:
the microprocessor for controlling the cellular receiver based on execution of the first or
second set of operational instructions;
the cellular receiver for scanning for a strongest cellular signal from among available
5 cellular system channels based on the first set of operational instructions executed
by the microprocessor when the first activation button is pressed; and
the cellular receiver for scanning for a strongest cellular signal from among available
cellular system channels based on the second set of operational instructions
executed by the microprocessor when the second activation button is pressed.

10. The emergency cellular telephone of claim 9 further comprising the microprocessor and
receiver for determining a strongest B cellular signal from among cellular signals found in
B cellular system channels when the first or second activation button is pressed the first
time, for determining whether the strongest B cellular signal has a signal strength greater
5 than a minimum threshold, and for determining a strongest A cellular signal from among
cellular signals found in A cellular system channels when the strongest B cellular signal
has a signal strength less than the minimum threshold.

11. The emergency cellular telephone of claim 9 further comprising the microprocessor and
receiver for determining a strongest A cellular signal from among cellular signals found
in A cellular system channels when the first or second activation button is pressed the first
time, for determining whether the strongest A cellular signal has a signal strength greater
5 than a minimum threshold, and for determining a strongest B cellular signal from among
cellular signals found in B cellular system channels when the strongest A cellular signal
has a signal strength less than the minimum threshold.

12. The emergency cellular telephone of claim 1 further comprising:
the first activation button for causing the emergency cellular telephone to terminate
communication with the first emergency response service when the first activation
button is pressed a second time that is subsequent to the first time; and
5 the second activation button for causing the emergency cellular telephone to terminate
communication with the second emergency response service when the second
activation button is pressed a second time that is subsequent to the first time.

13. The emergency cellular telephone of claim 9 further comprising:
a memory device for storing a first emergency telephone number associated with the first
emergency response service, and for storing a second emergency telephone
number associated with the second emergency response service;
5 the microprocessor for accessing the first emergency telephone number from the memory
device and for activating the cellular transmitter when the first activation button is
pressed the first time and a signal strength of the strongest signal is greater than a
minimum threshold;
the microprocessor for accessing the second emergency telephone number from the
10 memory device and for activating the cellular transmitter when the second
activation button is pressed the first time and a signal strength of the strongest
signal is greater than a minimum threshold;
the cellular transmitter for transmitting the first outgoing cellular signal when activated by
the microprocessor to attempt to establish cellular communication with the first
15 emergency response service associated with the first emergency telephone
number; and
the cellular transmitter for transmitting the second outgoing cellular signal when activated
by the microprocessor to attempt to establish cellular communication with the
second emergency response service associated with the second emergency
20 telephone number.

14. The emergency cellular telephone of claim 13 further comprising the memory device for
storing the first emergency telephone number associated with a public emergency

response service, and for storing the second emergency telephone number associated with a private customer assistance service.

15. An emergency cellular telephone for establishing communication with multiple emergency response services, comprising:

a handheld housing;

a cellular transmitter disposed within the housing for transmitting only first and second outgoing cellular signals, the first outgoing cellular signal for establishing a first communication session with a public emergency response service and the second outgoing cellular signal for establishing a second communication session with a private emergency response service;

a cellular receiver disposed within the housing for receiving only first and second incoming cellular signals, the first incoming cellular signal received from the public emergency response service during the first communication session, and the second incoming cellular signal received from the private emergency response service during the second communication session;

a memory device disposed within the housing for storing a first emergency telephone number associated with the public emergency response service, and a second emergency telephone number associated with the private emergency response service;

a microprocessor disposed within the housing for controlling the cellular receiver based on execution of a first or second set of operational instructions;

a power supply disposed within the housing for supplying electrical power for the telephone;

a first activation button attached to the housing that, if pressed a first time when the telephone is in an off mode, causes the electrical power from the power supply to be provided to the cellular transmitter, the cellular receiver, and the microprocessor, initiates the microprocessor to begin executing the first set of operational instructions, initiates activation of the cellular receiver to search for an available cellular system channel, and initiates activation of the cellular transmitter to transmit the first outgoing cellular signal to establish communication with the public emergency response service, thereby simplifying

30

communication with the public emergency response service in a stressful situation;

35

a second activation button attached to the housing that, if pressed a first time when the telephone is in the off mode, causes the electrical power from the power supply to be provided to the cellular transmitter, the cellular receiver, and the microprocessor, initiates the microprocessor to begin executing the second set of operational instructions, initiates activation of the cellular receiver to search for an available cellular system channel, and initiates activation of the cellular transmitter to transmit the second outgoing cellular signal to establish communication with the private emergency response service, thereby simplifying communication with the private emergency response service in a stressful situation;

40

the cellular receiver further for scanning for a strongest cellular signal from among available cellular system channels based on the first set of operational instructions executed by the microprocessor when the first activation button is pressed, and for scanning for a strongest cellular signal from among available cellular system channels based on the second set of operational instructions executed by the microprocessor when the second activation button is pressed;

45

the microprocessor further for accessing the first emergency telephone number from the memory device and for activating the cellular transmitter when the first activation button is pressed the first time and a signal strength of the strongest signal is greater than a minimum threshold;

50

the microprocessor further for accessing the second emergency telephone number from the memory device and for activating the cellular transmitter when the second activation button is pressed the first time and the signal strength of the strongest signal is greater than the minimum threshold;

55

the cellular transmitter further for transmitting the first outgoing cellular signal when activated by the microprocessor to attempt to establish the first communication session with the public emergency response service associated with the first emergency telephone number, and for transmitting the second outgoing cellular signal when activated by the microprocessor to attempt to establish the second

60

communication with the private emergency response service associated with the second emergency telephone number;

the cellular transmitter further operable to transmit the first outgoing cellular signal to establish the first communication session regardless of whether the telephone had last established a first communication session or a second communication session, and operable to transmit the second outgoing cellular signal to establish the second communication session regardless of whether the telephone had last established a first communication session or a second communication session;

the first activation button further for causing the emergency cellular telephone to terminate communication with the public emergency response service when the first activation button is pressed a second time that is subsequent to the first time; and

the second activation button further for causing the emergency cellular telephone to terminate communication with the private emergency response service when the second activation button is pressed a second time that is subsequent to the first time

16. An emergency cellular telephone for establishing communication with multiple emergency response services, comprising:

a memory device operable to store only a first telephone number and a second telephone number, and no other telephone numbers;

a first and a second activation button, and no other activation buttons;

a cellular transmitter coupled to the first and second activation buttons, the transmitter only operable when activated by pressure upon the first or second activation button, and for transmitting outgoing cellular signals when activated;

a cellular receiver coupled to the first and second activation buttons, the receiver only operable to receive and process incoming cellular signals from a first emergency response service associated with the first telephone number when activated a first time by pressure upon the first activation button, the receiver only operable to receive and process incoming cellular signals from a second emergency response service associated with the second telephone number when activated a first time by pressure upon the second activation button; and

a microprocessor coupled to the memory device, the cellular transmitter, the cellular receiver, and the first and second activation buttons, the microprocessor only operable when activated by pressure upon the first or second activation button, the microprocessor for accessing the memory device, retrieving the first telephone number, and providing the first telephone number to the cellular transmitter when activated by pressure upon the first activation button, and for accessing the memory device, retrieving the second telephone number, and providing the second telephone number to the cellular transmitter when activated by pressure upon the second activation button.

17. The emergency cellular telephone of claim 16 further comprising:
the microprocessor for controlling the cellular receiver based on execution of a first or a second set of operational instructions;
the cellular receiver for scanning for a strongest cellular signal from among available cellular system channels based on the first set of operational instructions executed by the microprocessor when the first activation button is pressed; and
the cellular receiver for scanning for a strongest cellular signal from among available cellular system channels based on the second set of operational instructions executed by the microprocessor when the second activation button is pressed.
18. The emergency cellular telephone of claim 17 further comprising the microprocessor and receiver for determining a strongest B cellular signal from among cellular signals found in B cellular system channels when the first or second activation button is pressed the first time, for determining whether the strongest B cellular signal has a signal strength greater than a minimum threshold, and for determining a strongest A cellular signal from among cellular signals found in A cellular system channels when the strongest B cellular signal has a signal strength less than the minimum threshold.
19. The emergency cellular telephone of claim 17 further comprising the microprocessor and receiver for determining a strongest A cellular signal from among cellular signals found in A cellular system channels when the first or second activation button is pressed the first time, for determining whether the strongest A cellular signal has a signal strength greater than a minimum threshold, and for determining a strongest B cellular signal from among

cellular signals found in B cellular system channels when the strongest A cellular signal has a signal strength less than the minimum threshold.

20. The emergency cellular telephone of claim 16 further comprising:
the first activation button for causing the emergency cellular telephone to terminate communication with the first emergency response service when the first activation button is pressed a second time that is subsequent to the first time; and
5 the second activation button for causing the emergency cellular telephone to terminate communication with the second emergency response service when the second activation button is pressed a second time that is subsequent to the first time.